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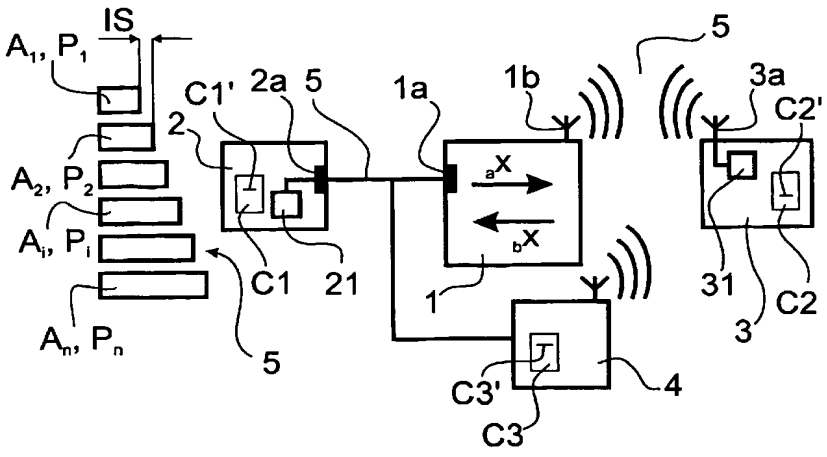
(54) Title: METHOD AND SYSTEM FOR QUANTIFYING THE PERFORMANCE OF NETWORK COMPONENT



$$x = \frac{S_{i+1} - S_i}{IS} \qquad (I)$$

(57) Abstract: The present invention relates to a method and a system for quantifying the performance of a component (1) adapted to function as a node in a communications network, where the service time delay (S) for an information unit (A) with a certain payload (P) is known as the time difference between the time of departure (td) of said information unit (A) and the time of arrival (ta) of said information unit (A), where a first service time (S1) is known for a first information unit (A1) with a first payload (P1), a second service time (S2) is known for a second information unit (A2) with a second payload (P2), and so on to a last information unit (An) with a last payload (Pn) in a stream of payloads, and where the incremental step (IS) of payload between said first, second and following information units (A1, A2, .., An) is predefined. The present invention teaches that the component is represented by a virtual distance (x) according to the following formula (I) where the virtual distance x is a representation of a metric that relates to intrinsic properties of the component, allowing a quantification of the performance of the component. The present invention also teaches the use of statistical methods to obtain values for service times (S) and virtual distance (x) with sufficient accuracy and certainty.

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